





ATG GAAACAGACGCTATTGATGGCTATATAACATGTGACAATGAGCTTTCACCCGAAGGGGAACACGCCA  
TAC CTTTGTCTGCGATAACTACCGATATATTGTACACTGTTACTCGAAAGTGGGCTTCCCCTTGTGCGGT 70  
M E T D A I D G Y I T C D N E L S P E G E H A

ATA TGGCCATTGACCTCACCTCAAGCACGCCCAATGGACAGCAGCCTCGCCAAGTCACATGACAAGCAC  
TAT ACCGGTAACTGGAGTGGAGTTCGTGCGGGTTACCTGTCGTGCGGAGCGGTTCAGTGTACTGTTTCGTG 140  
N M A I D L T S S T P N G Q H A S P S H M T S T

AAA TTCTGTAAAGCTGGAAATGCAGAGTGATGAAGAGTGTGACAGGCAGCCCCTGAGCCGTGAGGATGAG  
TTT AAGACATTTTCGACCTTTACGTCTCACTACTTCTCACACTGTCCGTGCGGGACTCGGCACTCCTACTC 210  
N S V K L E M Q S D E E C D R Q P L S R E D E

ATCAGGGGCCACGATGAGGGGAGCAGCCTAGAAGAACCCTAATTGAGAGCAGCGAGGTGGCCGACAACA  
TAGTCCCCGGTGCTACTCCCTCGTCCGATCTTCTTGGGGATTAACCTCTCGTCGCTCCACCGGCTGTTGT 280  
I R G H D E G S S L E E P L I E S S E V A D N

GGAAAGTCCAGGACCTTCAAGGCGAGGGAGGAATCCGGCTTCCGAATGGTAAACTGAAATGTGACGTCTG  
CCTTTCAGGTCTGGAAGTTCGCTCCCTCCTTAGGCCGAAGGCTTACCATTGACTTTACACTGCAGAC 350  
R K V Q D L Q G E G G I R L P N G K L K C D V C

TGGCATGGTTTGCATTGGGCCCAATGTGCTTATGGTACATAAAAGGAGTCACACTGGTGAGCGGCCCTTC  
ACCGTACCAAACGTAACCCGGGTTACACGAATACCATGTATTTTCCTCAGTGTGACCACTCGCCGGGAAG 420  
G M V C I G P N V L M V H K R S H T G E R P F

CACTGTAACCAGTGCGGAGCTTCTTTTACCCAGAAGGGCAACCTTCTGAGACAGATAAAGTTACACTCTG  
GTGACATTGGTCACGCCTCGAAGAAAATGGGTCTTCCCGTTGGAAGACTCTGTGTATTTCAATGTGAGAC 490  
H C N Q C G A S F T Q K G N L L R H I K L H S

GAGAGAAGCCCTTCAAATGTCCTTTCTGTAGCTATGCTTGTAGAAGAAGGGACGCTCTCACAGGACACCT  
CTCTCTTCGGGAAGTTTACAGGAAAGACATCGATACGAACATCTTCTTCCCTGCGAGAGTGTCTGTGGA 560  
G E K P F K C P F C S Y A C R R R D A L T G H L

CAGGACCCATTCTGTGGGTAAACCTCACAAGTGTAACTACTGTGGCCGAAGCTACAAGCAGCGCACGTCA  
GTCCTGGGTAAAGACACCCATTTGGAGTGTTCACATTGATGACACCGGCTTCGATGTTTCGTGCGGTGCAGT 630  
R T H S V G K P H K C N Y C G R S Y K Q R T S

FIG. 3A

CTGGAGGAACACAAGGAACGCTGTCACAACTATCTCCAGAATGTCAGCATGGAGGCTGCCGGGCAGGTCA 700  
GACCTCCTTGTGTTCTTGGCAGAGTGTGATAGAGGTCTTACAGTCGTACCTCCGACGGCCCGTCCAGT  
L E E H K E R C H N Y L Q N V S M E A A G Q V  
TGAGTCACCATGTACCGCCTATGGAAGATTGTAAGGAACAAGAGCCTATCATGGACAACAATATTTCTCT 770  
ACTCAGTGGTACATGGCGGATACCTTCTAACATTCTTGTCTCGGATAGTACCTGTTGTTATAAAGAGA  
M S H H V P P M E D C K E Q E P I M D N N I S L  
GGTGCCTTTTGAGAGACCTGCTGTCATAGAGAAGCTCACGGCAAATATGGGAAAGCGCAAAAGCTCCACT 840  
CCACGGAAACTCTCTGGACGACAGTATCTCTTCGAGTGCCGTTTATACCCTTTCGCGTTTTTCGAGGTGA  
V P F E R P A V I E K L T A N M G K R K S S T  
CCTCAGAAGTTTGTGGGGGAAAAGCTTATGCGATTCAGCTACCCAGATATTCATTTTGATATGAACTTAA 910  
GGAGTCTTCAAACACCCCCCTTTTGAATACGCTAAGTCGATGGGTCTATAAGTAAACTATACTTGAATT  
P Q K F V G E K L M R F S Y P D I H F D M N L  
CATATGAGAAGGAGGCTGAGCTGATGCAGTCTCATATGATGGACCAAGCCATCAACAATGCAATCACCTA 980  
GTATACTCTTCTCCGACTCGACTACGTCAGAGTATACTACCTGGTTCGGTAGTTGTTACGTTAGTGGAT  
T Y E K E A E L M Q S H M M D Q A I N N A I T Y  
CCTTGGAGCTGAGGCCCTTCACCCTCTGATGCAGCATGCACCAAGCACAATCGCTGAGGTGGCCCCAGTT 1050  
GGAACCTCGACTCCGGGAAGTGGGAGACTACGTCGTACGTGGTTCGTGTTAGCGACTCCACCGGGGTCAA  
L G A E A L H P L M Q H A P S T I A E V A P V  
ATAAGCTCAGCTTATTCTCAGGTCTATCATCAAACAGGATAGAAAGACCCATTAGCAGGGAAACATCTG 1120  
TATTCGAGTCGAATAAGAGTCCAGATAGTAGGTTTGTCTATCTTTCTGGGTAATCGTCCCTTTGTAGAC  
I S S A Y S Q V Y H P N R I E R P I S R E T S  
ATAGTCACGAAAACAACATGGATGGCCCCATCTCTCTCATCAGACCAAGAGTCGACCCCAGGAAAGAGA 1190  
TATCAGTGCTTTTGTGTACCTACCGGGGTAGAGAGAGTAGTCTGGTTTCTCAGCTGGGGTCCCTTTCTCT  
D S H E N N M D G P I S L I R P K S R P Q E R E  
GGCCTCGCCCAGCAATAGCTGCCTCGATTCTACTGACTCAGAAAGTAGCCATGATGACCGCCAGTCCTAC 1260  
CCGGAGCGGGTCGTTATCGACGGAGCTAAGATGACTGAGTCTTTCATCGGTACTACTGGCGGTCAGGATG  
A S P S N S C L D S T D S E S S H D D R Q S Y

FIG. 3B

CAAGGAAACCCTGCCTTAAATCCCAAGAGGAAACAAAGCCCAGCTTACATGAAGGAGGATGTCAAGGCTT 1330  
GTTCCCTTTGGGACGGAATTTAGGGTTCTCCTTTGTTTCGGGTCGAATGTACTTCCTCCTACAGTTCCGAA  
Q G N P A L N P K R K Q S P A Y M K E D V K A  
TGGATGCTACCAAGGCCCCCAAGGGCTCTCTGAAGGACATCTATAAGGTTTTCAATGGAGAAGGAGAACA 1400  
ACCTACGATGGTTCCGGGGGTTCCCGAGAGACTTCCTGTAGATATTCCAAAAGTTACCTCTTCCTCTTGT  
L D A T K A P K G S L K D I Y K V F N G E G E Q  
GATAAGGGCCTTCAAGTGTGAGCACTGCCGAGTCCTTTTTCTAGACCATGTCATGTACACCATTCACATG 1470  
CTATTCCCGGAAGTTCACACTCGTGACGGCTCAGGAAAAAGATCTGGTACAGTACATGTGGTAAGTGTAC  
I R A F K C E H C R V L F L D H V M Y T I H M  
GGTTGCCATGGCTACCGGGACCCACTGGAATGCAACATCTGTGGCTACAGAAGCCAGGACCGCTACGAAT 1540  
CCAACGGTACCGATGGCCCTGGGTGACCTTACGTTGTAGACACCGATGTCTTCGGTCCTGGCGATGCTTA  
G C H G Y R D P L E C N I C G Y R S Q D R Y E  
TTTCATCACACATTGTTGGGGGGCAGCACACATTCCACTAGGCGTTTGCATTCCAAGG 1598  
AAAGTAGTGTGTAACAACCCCCGTCGTGTGTAAGGTGATCCGCAAACGTAAGGTTCC  
F S S H I V G G Q H T F H A F A F Q G

FIG. 3C

ATGGAACAGACGCTATTGATGGCTATATAACATGTGACAATGAGCTTTCACCCGAAGGGGAACACGCCA  
TACCTTTGTCTGCGATAACTACCGATATATTGTACACTGTTACTCGAAAGTGGGCTTCCCCTTGTGCGGT 70  
M E T D A I D G Y I T C D N E L S P E G E H A  
ATATGGCCATTGACCTCACCTCAAGCACGCCCAATGGACAGCACGCCTCGCCAAGTCACATGACAAGCAC  
TATACCGGTAACCTGGAGTGGAGTTCGTGCGGGTTACCTGTCGTGCGGAGCGGTTTCAGTGTACTGTTTCGTG 140  
N M A I D L T S S T P N G Q H A S P S H M T S T  
AAATTCTGTAAAGCTGGAAATGCAGAGTGATGAAGAGTGTGACAGGCAGCCCCTGAGCCGTGAGGATGAG  
TTTAAGACATTTTCGACCTTTACGTCTCACTACTTCTCACACTGTCCGTCGGGGACTCGGCACTCCTACTC 210  
N S V K L E M Q S D E E C D R Q P L S R E D E  
ATCAGGGGCCACGATGAGGGGAGCAGCCTAGAAGAACCCCTAATTGAGAGCAGCGAGGTGGCCGACAACA  
TAGTCCCCGGTGCTACTCCCCTCGTCGGATCTTCTTGGGGATTAACCTCTCGTCGCTCCACCGGCTGTTGT 280  
I R G H D E G S S L E E P L I E S S E V A D N  
GGAAAGTCCAGGACCTTCAAGGCGAGGGAGGAATCCGGCTTCCGAATGGTGAGCGGCCCTTCCACTGTAA  
CCTTTCAGGTCCTGGAAGTTCGGCTCCCTCCTTAGGCCGAAGGCTTACCACTCGCCGGGAAGGTGACATT 350  
R K V Q D L Q G E G G I R L P N G E R P F H C N  
CCAGTGCGGAGCTTCTTTTACCCAGAAGGGCAACCTTCTGAGACACATAAAGTTACACTCTGGAGAGAAG  
GGTCACGCCTCGAAGAAAATGGGTCTTCCCGTTGGAAGACTCTGTGTATTTCAATGTGAGACCTCTCTTC 420  
Q C G A S F T Q K G N L L R H I K L H S G E K  
CCCTTCAAATGTCCTTTCTGTAGCTATGCTTGTAGAAGAAGGGACGCTCTCACAGGACACCTCAGGACCC  
GGGAAGTTTACAGGAAAGACATCGATACGAACATCTTCTTCCCTGCGAGAGTGTCCTGTGGAGTCCTGGG 490  
P F K C P F C S Y A C R R R D A L T G H L R T  
ATTCTGTGGGTAAACCTCACAAGTGTAACACTGTGGCCGAAGCTACAAGCAGCGCACGTCACTGGAGGA  
TAAGACACCCATTTGGAGTGTTACATTGATGACACCGGCTTCGATGTTTCGTGCGGTGCAGTGACCTCCT 560  
H S V G K P H K C N Y C G R S Y K Q R T S L E E  
ACACAAGGAACGCTGTCACAACCTATCTCCAGAATGTCAGCATGGAGGCTGCCGGGCAGGTCATGAGTCAC  
TGTGTTCTTGCGACAGTGTTGATAGAGGTCTTACAGTCGTACCTCCGACGGCCCGTCCAGTACTCAGTG 630  
H K E R C H N Y L Q N V S M E A A G Q V M S H

FIG. 4A

CATGTACCGCCTATGGAAGATTGTAAGGAACAAGAGCCTATCATGGACAACAATATTTCTCTGGTGCCTT  
GTACATGGCGGATACCTTCTAACATTCCTTGTTCCTCGGATAGTACCTGTTGTTATAAAGAGACCACGGAA 700  
H V P P M E D C K E Q E P I M D N N I S L V P

TTGAGAGACCTGCTGTCATAGAGAAGCTCACGGCAAATATGGGAAAGCGCAAAAGCTCCACTCCTCAGAA  
AACTCTCTGGACGACAGTATCTCTTCGAGTGCCGTTTATACCTTTTCGCGTTTTCGAGGTGAGGAGTCTT 770  
F E R P A V I E K L T A N M G K R K S S T P Q K

GTTTGTGGGGGAAAAGCTTATGCGATTCAGCTACCCAGATATTCATTTTGATATGAACTTAACATATGAG  
CAAACACCCCTTTTTCGAATACGCTAAGTCGATGGGTCTATAAGTAAACTATACTTGAATTGTATACTC 840  
F V G E K L M R F S Y P D I H F D M N L T Y E

AAGGAGGCTGAGCTGATGCAGTCTCATATGATGGACCAAGCCATCAACAATGCAATCACCTACCTTGGAG  
TTCTCCGACTCGACTACGTCAGAGTATACTACCTGGTTCGGTAGTTGTTACGTTAGTGGATGGAACCTC 910  
K E A E L M Q S H M M D Q A I N N A I T Y L G

CTGAGGCCCTTCACCCTCTGATGCAGCATGCACCAAGCACAATCGCTGAGGTGGCCCCAGTTATAAGCTC  
GACTCCGGGAAGTGGGAGACTACGTCGTACGTGGTTCGTGTTAGCGACTCCACCGGGTCAATATTCGAG 980  
A E A L H P L M Q H A P S T I A E V A P V I S S

AGCTTATTCTCAGGTCTATCATCCAAACAGGATAGAAAGACCCATTAGCAGGGAAACATCTGATAGTCAC  
TCGAATAAGAGTCCAGATAGTAGGTTTGTCTATCTTTCTGGGTAATCGTCCCTTTGTAGACTATCAGTG 1050  
A Y S Q V Y H P N R I E R P I S R E T S D S H

GAAAACAACATGGATGGCCCCATCTCTCTCATCAGACCAAAGAGTCGACCCCAGGAAAGAGAGGCCTCGC  
CTTTTGTGTACCTACCGGGGTAGAGAGAGTAGTCTGGTTTCTCAGCTGGGGTCCTTTCTCTCCGGAGCG 1120  
E N N M D G P I S L I R P K S R P Q E R E A S

CCAGCAATAGCTGCCTCGATTCTACTGACTCAGAAAGTAGCCATGATGACCGCCAGTCCTACCAAGGAAA  
GGTCGTTATCGACGGAGCTAAGATGACTGAGTCTTTCATCGGTACTACTGGCGGTGAGGATGGTTCTTT 1190  
P S N S C L D S T D S E S S H D D R Q S Y Q G N

CCCTGCCTTAAATCCCAAGAGGAAACAAAGCCCAGCTTACATGAAGGAGGATGTCAAGGCTTTGGATGCT  
GGGACGGAATTTAGGGTTCTCCTTTGTTTCGGGTGCAATGTACTTCTCCTACAGTTCCGAAACCTACGA 1260  
P A L N P K R K Q S P A Y M K E D V K A L D A

FIG. 4B

ACCAAGGCCCCCAAGGGCTCTCTGAAGGACATCTATAAGGTTTTCAATGGAGAAGGAGAACAGATAAGGG  
TGGTTCCGGGGGTTCCCGAGAGACTTCCTGTAGATATTCCAAAAGTTACCTCTTCCTCTTGTCTATTCCC 1330  
T K A P K G S L K D I Y K V F N G E G E Q I R

CCTTCAAGTGTGAGCACTGCCGAGTCCTTTTTCTAGACCATGTCATGTACACCATTACATGGGTTGCCA  
GGAAGTTCACACTCGTGACGGCTCAGGAAAAAGATCTGGTACAGTACATGTGGTAAGTGTACCCAACGGT 1400  
A F K C E H C R V L F L D H V M Y T I H M G C H

TGGCTACCGGGACCCACTGGAATGCAACATCTGTGGCTACAGAAGCCAGGACCGCTACGAATTTTCATCA  
ACCGATGGCCCTGGGTGACCTTACGTTGTAGACACCGATGTCTTCGGTCCTGGCGATGCTTAAAAGTAGT 1470  
G Y R D P L E C N I C G Y R S Q D R Y E F S S

CACATTGTTGGGGGGCAGCACACATTCCACTAGGCGTTTGCATTCCAAGG  
GTGTAACAACCCCCCGTCGTGTGTAAGGTGATCCGCAAACGTAAGGTTCC 1520  
H I V G G Q H T F H A F A F Q G

FIG. 4C

1/1	31/11
GCC CGG GCA GGT CGC ATT GCT ATA GCA CTG ACT GAC CTC TCT CTC TCT CTT TTT TTT CCT	
A R A G R I A I A L T D L S L S L F F P	
61/21	91/31
CTT TCC TGA AAC CCG ACA TTG TCA CCT CCT CTT TGA GGG TTA GAA GAA GCT GAG ATC TCC	
L S * N P T L S P P L * G L E E A E I S	
121/41	151/51
CGA CAG AGC TGG AAA TGG TGA TGA ATC TTT TTT AAT CAA AGG ACA ATT TCT TTT CAT TGC	
R Q S W K W * * I F F N Q R T I S F H C	
181/61	211/71
ACT TTG ACT ATG GAA ACA GAG GCT ATT GAT GGC TAT ATA ACG TGT GAC AAT GAG CTT TCA	
T L T M E T E A I D G Y I T C D N E L S	
241/81	271/91
CCC GAA AGG GAG CAC TCC AAT ATG GCA ATT GAC CTC ACC TCA AGC ACA CCC AAT GGA CAG	
P E R E H S N M A I D L T S S T P N G Q	
301/101	331/111
CAT GCC TCA CCA AGT CAC ATG ACA AGC ACA GAT TCA GTA AAG CTA GAA ATG CAG AGT GAT	
H A S P S H M T S T D S V K L E M Q S D	
361/121	391/131
GAA GAG TGT GAC AGG AAA CCC CTG AGC CGT GAA GAT GAG ATC AGG GGC CAT GAT GAG GGT	
E E C D R K P L S R E D E I R G H D E G	
421/141	451/151
AGC AGC CTA GAA GAA CCC CTA ATT GAG AGC AGC GAG GTG GCT GAC AAC AGG GAA GTC CAG	
S S L E E P L I E S S E V A D N R E V Q	
481/161	511/171
GAG CTT CAA GGC GAG GGA GGA ATC CGG CTT CCG AAT GGT AAA CTG AAA TGT GAC GTC TGT	
E L Q G E G G I R L P N G K L K C D V C	
541/181	571/191
GGC ATG GTT TGC ATT GGG CCC AAT GTG CTT ATG GTA CAT AAA AGG AGT CAC ACT GGT GAA	
G M V C I G P N V L M V H K R S H T G E	
601/201	631/211
CGC CCC TTC CAC TGT AAC CAG TGT GGA GCT TCT TTT ACT CAG AAG GGC AAC CTT CTG AGA	
R P F H C N Q C G A S F T Q K G N L L R	
661/221	691/231
CAC ATA AAG TTA CAC TCT GGA GAG AAG CCG TTC AAA TGT CCT TTC TGT AGT CAC GCC TGT	
H I K L H S G E K P F K C P F C S H A C	
721/241	751/251
AGA AGA AGG GAC GCC CTC ACA GGA TAC CTC AGG ACC CAT TCT GTG GGT AAA CCT CAC AAG	
R R R D A L T G Y L R T H S V G K P H K	
781/261	811/271
TGC AAC TAC TGT GGA CGA AGC TAC AAG CAG CGC AGT TCA CTG GAG GAG CAC AAG GAA CGC	
C N Y C G R S Y K Q R S S L E E H K E R	
841/281	871/291
TGC CAC AAC TAT CTC CAG AAT GTC AGC ATG GAG GCT GCT GGG CAG GTC ATG AGT CAC CAT	
C H N Y L Q N V S M E A A G Q V M S H H	
901/301	931/311
GTA CCT CCT ATG GAA GAT TGT AAG GAA CAA GAG CCT ATT ATG GAC AAC AAT ATT TCT CTG	
V P P M E D C K E Q E P I M D N N I S L	
961/321	991/331
GTG CCT TTT GAG AGA CCT GCT GTC ATA GAG AAG CTC ACG GGG AAT ATG GGA AAA CGT AAA	
V P F E R P A V I E K L T G N M G K R K	
1021/341	1051/351
AGC TCC ACT CCA CAA AAG TTT GTG GGG GAA AAG CTC ATG CGA TTC AGC TAC CCA GAT ATT	
S S T P Q K F V G E K L M R F S Y P D I	
1081/361	1111/371
CAC TTT GAT ATG AAC TTA ACA TAT GAG AAG GAG GCT GAG CTG ATG CAG TCT CAT ATG ATG	
H F D M N L T Y E K E A E L M Q S H M M	
1141/381	1171/391
GAC CAA GCC ATC AAC AAT GCA ATC ACC TAC CTT GGA GCT GAG GCC CTT CAC CCT CTG ATG	
D Q A I N N A I T Y L G A E A L H P L M	
1201/401	1231/411
CAG CAC CCG CCA AGC ACA ATC GCT GAA GTG GCC CCA GTT ATA AGC TCA GCT TAT TCT CAG	
Q H P P S T I A E V A P V I S S A Y S Q	

FIG. 5A

1261/421  
 GTC TAT CAT CCA AAT AGG ATA GAA AGA CCC ATT AGC AGG GAA ACT GCT GAT AGT CAT GAA  
 V Y H P N R I E R P I S R E T A D S H E  
 1321/441  
 AAC AAC ATG GAT GGC CCC ATC TCT CTC ATC AGA CCA AAG AGT CGA CCC CAG GAA AGA GAG  
 N N M D G P I S L I R P K S R P Q E R E  
 1381/461  
 GCC TCT CCC AGC AAT AGC TGC CTG GAT TCC ACT GAC TCA GAA AGC AGC CAT GAT GAC CAC  
 A S P S N S C L D S T D S E S S H D D H  
 1441/481  
 CAG TCC TAC CAA GGA CAC CCT GCC TTA AAT CCC AAG AGG AAA CAA AGC CCA GCT TAC ATG  
 Q S Y Q G H P A L N P K R K Q S P A Y M  
 1501/501  
 AAG GAG GAT GTC AAA GCT TTG GAT ACT ACC AAG GCT CCT AAG GGC TCT CTG AAG GAC ATC  
 K E D V K A L D T T K A P K G S L K D I  
 1561/521  
 TAC AAG GTC TTC AAT GGG GAA GGA GAA CAG ATT AGG GCC TTC AAG TGT GAG CAC TGC CGA  
 Y K V F N G E G E Q I R A F K C E H C R  
 1621/541  
 GTC CTT TTC CTA GAC CAT GTC ATG TAC ACC ATT CAC ATG GGT TGC CAT GGC TAC CGG GAC  
 V L F L D H V M Y T I H M G C H G Y R D  
 1681/561  
 CCA CTG GAA TGT AAC ATC TGT GGC TAC AGA AGC CAG GAC CGT TAT GAG TTT TCA TCA CAC  
 P L E C N I C G Y R S Q D R Y E F S S H  
 1741/581  
 ATT GTT CGA GGG GAG CAC ACA TTC CAC TAG GCC TTT TCA TTC CAA AGG GGA CCC TAT GAA  
 I V R G E H T F H \* A F S F Q R G P Y E  
 1801/601  
 GTA AAG ACT GCA CAT GAA GAA ATA CTG CAC TTA CAA TCC CAC CTT TCC TCA AAT GTT GTA  
 V K T A H E E I L H L Q S H L S S N V V  
 1861/621  
 CCT TTT APT TTT TTA ATA TAA TAC TGG TGA TAA TCT TAT TTT GTG GAG CAG TGT CAT TTG  
 P F I F L I \* Y W \* \* S Y F V E Q C H L  
 1921/641  
 CTC TGC T  
 L C

FIG. 5B

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1  ATGGAAACAGACGCTATTGATGGCTATATAACATGTGACAATGAGCTTTC 50
   |||||||||||||||||||||||||||||||||||||||||||||||||||
190 ATGGAAACAGAGGCTATTGATGGCTATATAACGTGTGACAATGAGCTTTC 239
   |||||||||||||||||||||||||||||||||||||||||||||||||||
51  ACCCGAAGGGGAACACGCCAATATGGCCATTGACCTCACCTCAAGCACGC 100
   |||||||||||||||||||||||||||||||||||||||||||||||||||
240 ACCCGAAGGGGAGCACTCCAATATGGCAATTGACCTCACCTCAAGCACAC 289
   |||||||||||||||||||||||||||||||||||||||||||||||||||
101 CCAATGGACAGCAcGCCTCGCCAAGTCACATGACAAGCACAAATTCTGTA 150
   |||||||||||||||||||||||||||||||||||||||||||||||||||
290 CCAATGGACAGCATGCCTCACCAAGTCACATGACAAGCACAGATTTCAGTA 339
   |||||||||||||||||||||||||||||||||||||||||||||||||||
151 AAGCTGGAAATGCAGAGTGATGAAGAGTGTGACAGGCAGCCCCTGAGCCG 200
   |||||||||||||||||||||||||||||||||||||||||||||||||||
340 AAGCTAGAAATGCAGAGTGATGAAGAGTGTGACAGGAAACCCCTGAGCCG 389
   |||||||||||||||||||||||||||||||||||||||||||||||||||
201 TGAGGATGAGATCAGGGGCCACGATGAGGGGAGCAGCCTAGAAGAcCCC 250
   |||||||||||||||||||||||||||||||||||||||||||||||||||
390 TGAAGATGAGATCAGGGGCCATGATGAGGGTAGCAGCCTAGAAGAACCCC 439
   |||||||||||||||||||||||||||||||||||||||||||||||||||
251 TAATTGAGAGCAGCGAGGTGGCCGACAACAGGAAAGTCCAGGACCTTCAA 300
   |||||||||||||||||||||||||||||||||||||||||||||||||||
440 TAATTGAGAGCAGCGAGGTGGCTGACAACAGGGAAGTCCAGGAGCTTCAA 489
   |||||||||||||||||||||||||||||||||||||||||||||||||||
301 GGCGAGGGAGGAATCCGGCTTCCGAATGGTAAACTGAAATGTGACGTCTG 350
   |||||||||||||||||||||||||||||||||||||||||||||||||||
490 GGCGAGGGAGGAATCCGGCTTCCGAATGGTAAACTGAAATGTGACGTCTG 539
   |||||||||||||||||||||||||||||||||||||||||||||||||||
351 TGGCATGGTTTGCATTGGGCCCAATGTGCTTATGGTACATAAAAGGAGTC 400
   |||||||||||||||||||||||||||||||||||||||||||||||||||
540 TGGCATGGTTTGCATTGGGCCCAATGTGCTTATGGTACATAAAAGGAGTC 589
   |||||||||||||||||||||||||||||||||||||||||||||||||||
401 AACTGGTGAGCGGCCCTTCCACTGTAACCAGTGCGGAGCTTCTTTTACC 450
   |||||||||||||||||||||||||||||||||||||||||||||||||||
590 AACTGGTGAAACGCCCTTCCACTGTAACCAGTGTGGAGCTTCTTTTACT 639
   |||||||||||||||||||||||||||||||||||||||||||||||||||
451 CAGAAGGGCAACCTTCTGAGACACATAAAGTTACACTCTGGAGAGAAGCC 500
   |||||||||||||||||||||||||||||||||||||||||||||||||||
640 CAGAAGGGCAACCTTCTGAGACACATAAAGTTACACTCTGGAGAGAAGCC 689
   |||||||||||||||||||||||||||||||||||||||||||||||||||
501 CTTCAAATGTCCTTTCTGTAGCTATGCTTGTAGAAGAAGGGACGCTCTCA 550
   |||||||||||||||||||||||||||||||||||||||||||||||||||
690 GTTCAAATGTCCTTTCTGTAGTCACGCCTGTAGAAGAAGGGACGCCCTCA 739
   |||||||||||||||||||||||||||||||||||||||||||||||||||
551 CAGGACACCTCAGGACCCATTCTGTGGGTAAACCTCACAAGTGTAACACTAC 600
   |||||||||||||||||||||||||||||||||||||||||||||||||||
740 CAGGATACCTCAGGACCCATTCTGTGGGTAAACCTCACAAGTGCAACTAC 789
   |||||||||||||||||||||||||||||||||||||||||||||||||||
601 TGTGGCCGAAGCTACAAGCAGCGCACGTCACTGGAGGAACACAAGGAACG 650
   |||||||||||||||||||||||||||||||||||||||||||||||||||
790 TGTGGACGAAGCTACAAGCAGCGCAGTTCCTGAGGAGCACAAGGAACG 839
   |||||||||||||||||||||||||||||||||||||||||||||||||||
651 CTGTCACAACTATCTCCAGAATGTCAGCATGGAGGCTGCCGGGCAGGTCA 700
   |||||||||||||||||||||||||||||||||||||||||||||||||||
840 CTGCCACAACTATCTCCAGAATGTCAGCATGGAGGCTGCTGGGCAGGTCA 889
   |||||||||||||||||||||||||||||||||||||||||||||||||||
701 TGAGTCACCATGTACCGCCTATGGAAGATTGTAAGGAACAAGAGCCTATC 750
   |||||||||||||||||||||||||||||||||||||||||||||||||||
890 TGAGTCACCATGTACCTCCTATGGAAGATTGTAAGGAACAAGAGCCTATT 939
   |||||||||||||||||||||||||||||||||||||||||||||||||||
751 ATGGACAACAATATTTCTCTGGTGCCTTTTGAGAGACCTGCTGTCATAGA 800
   |||||||||||||||||||||||||||||||||||||||||||||||||||

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FIG. 6A

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940 ATGGACAACAATATTTCTCTGGTGCCTTTTGAGAGACCTGCTGTCATAGA 989
801 GAAGCTCACGGCAAATATGGGAAAGCGCAAAGCTCCACTCCTCAGAAGT 850
    |||||
990 GAAGCTCACGGGGAATATGGGAAAACGTAAAAGCTCCACTCCACAAAAGT 1039
851 TTGTGGGGGAAAAGCTTATGCGATTTCAGCTACCCAGATATTCATTTTGAT 900
    |||||
1040 TTGTGGGGGAAAAGCTCATGCGATTTCAGCTACCCAGATATTCACTTTGAT 1089
901 ATGAACTTAACATATGAGAAGGAGGCTGAGCTGATGCAGTCTCATATGAT 950
    |||||
1090 ATGAACTTAACATATGAGAAGGAGGCTGAGCTGATGCAGTCTCATATGAT 1139
951 GGACCAAGCCATCAACAATGCAATCACCTACCTTGGAGCTGAGGCCCTTC 1000
    |||||
1140 GGACCAAGCCATCAACAATGCAATCACCTACCTTGGAGCTGAGGCCCTTC 1189
1001 ACCCTCTGATGCAGCATGCACCAAGCACAATCGCTGAGGTGGCCCCAGTT 1050
    |||||
1190 ACCCTCTGATGCAGCACCCGCAAGCACAATCGCTGAAGTGGCCCCAGTT 1239
1051 ATAAGCTCAGCTTATTCTCAGGTCTATCATCCAAACAGGATAGAAAGACC 1100
    |||||
1240 ATAAGCTCAGCTTATTCTCAGGTCTATCATCCAAATAGGATAGAAAGACC 1289
1101 CATTAGCAGGGAAACATCTGATAGTCACGAAAACAACATGGATGGCCCCA 1150
    |||||
1290 CATTAGCAGGGAAACTGCTGATAGTCATGAAAACAACATGGATGGCCCCA 1339
1151 TCTCTCTCATCAGACCAAAGAGTCGACCCCAGGAAAGAGAGGCCTCGCCC 1200
    |||||
1340 TCTCTCTCATCAGACCAAAGAGTCGACCCCAGGAAAGAGAGGCCTCTCCC 1389
1201 AGCAATAGCTGCCTCGATTCTACTGACTCAGAAAGTAGCCATGATGACCG 1250
    |||||
1390 AGCAATAGCTGCCTGGATTCCACTGACTCAGAAAGCAGCCATGATGACCA 1439
1251 CCAGTCCTACCAAGGAAACCCTGCCTTAAATCCCAAGAGGAAACAAAGCC 1300
    |||||
1440 CCAGTCCTACCAAGGACACCCTGCCTTAAATCCCAAGAGGAAACAAAGCC 1489
1301 CAGCTTACATGAAGGAGGATGTCAAGGCTTTGGATGCTACCAAGGCCCCC 1350
    |||||
1490 CAGCTTACATGAAGGAGGATGTCAAAGCTTTGGATACTACCAAGGCTCCT 1539
1351 AAGGGCTCTCTGAAGGACATCTATAAGGTTTTCAATGGAGAAGGAGAACA 1400
    |||||
1540 AAGGGCTCTCTGAAGGACATCTACAAGGTCTTCAATGGGGAAGGAGAACA 1589
1401 GATAAGGGCCTTCAAGTGTGAGCACTGCCGAGTCCTTTTTCTAGACCATG 1450
    |||||
1590 GATTAGGGCCTTCAAGTGTGAGCACTGCCGAGTCCTTTTCCTAGACCATG 1639
1451 TCATGTACACCATTACATGGGTGTCATGGCTACCGGGACCCACTGGAA 1500
    |||||
1640 TCATGTACACCATTACATGGGTGTCATGGCTACCGGGACCCACTGGAA 1689
1501 TGCAACATCTGTGGCTACAGAAGCCAGGACCGCTACGAATTTTCATCACA 1550
    |||||
1690 TGTAACATCTGTGGCTACAGAAGCCAGGACCGTTATGAGTTTTTCATCACA 1739
1551 CATTGTTGGGGGGCAGCACACATTCCACTAGGCGTTTGCATTCCAAGG 1598
    |||||
1740 CATTGTTGAGGGGAGCACACATTCCACTAGGCCTTTTCATTCCAAG 1787
  
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FIG. 6B

